

USAF Public Health Career Field News

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A Day in the life of a Deployed Public Health Officer

The following e-mail was sent from a deployed USAF Public Health Officer to an associate. Excerpts given in this newsletter are done with the permission of the author. I have omitted agency, personal, and place names for obvious reasons.

I salute the work of our USAF Public Health professionals at home and abroad. Furthermore, I'm personally proud of the assistance to other nations that has and is being provided by the American people. I consider it a privilege to be numbered among both groups.



Mac

The E-mail:

I appreciate you offering your expert eyes to help identify our mosquito species profile at the United States Support Group in (country). The mosquitoes will be coming soon.

(),. 6 Dec 97

Dear Folks,



I hit the ground in (country) Monday, and this week has sailed by like a blur of subway graffiti. (country) has to be the most destitute place I will ever see. I say this because I'm convinced the human condition can't get any worse than it is here. In this city of 2.5 million people, there is virtually no government. The small handful of

paid government employees apparently seldom report to work. The unemployment rate is 70%, the literacy rate is only 40%, the per capita income is about 350 dollars- a little less than the price of sending a child to school for a year.

There is no trash collection anywhere in the city; it is piled up everywhere and the humanity lives on it, around it, and in it. There are no bathrooms, and open sewers wind between the tightly packed shacks and piles of refuse. With no public health infrastructure, diseases run rampant. In (city #2), estimates say about 15 in every 100 healthy adults is infected with HIV. In a recent survey, the HIV rate for those who enter through the doors of our hospital is 40%. With so many people immune-suppressed from AIDS, tuberculosis is very common. Eighty percent of children here have intestinal worms and most have some form of skin disease as well. One in five will die before reaching the age of five.

There are seemingly no rules or laws here except those of the street, and only occasionally have I seen behavior dictated by human decency.

It's as though the people here have been reduced only to actions driven strictly by the will to

survive. Even for the very young, its every man for himself.

Traffic is unreal...absolutely unreal. Anything goes, and he with the most mass tonnage rules (Its actually kind of fun to drive once you get used to the game). ().

About forty medical people from (air force base) AFB including myself have the three month mission of improving health the (local) community using all available resources. We are supported by about 350 US Marine and Navy troops, 200 contract personnel, and about \$_____ for medical supplies. This support network was put in place to feed us, entertain us when we're not working, pay for haircuts, wash our laundry, and, most importantly, protect us as we venture into the utter chaos of (city #2) to administer medical care.

We go out into the community - to hospitals and orphanages mostly - about every day. We take supplies, doctors, nurses, and medical technicians...and of course, US Marines. We drive in an convoy, keeping jewelry and hats concealed to prevent them from being pulled off our persons. The streets are fast, loud, dusty, and choked with the heavy smell of burning wood, tires(protesters'fuel of choice), refuse, and car exhaust. We wind off the main street and creep along through alleys barely wide enough for our vehicles. We navigate through piles of refuse and puddles of malodorous swill, all the while the object of hundreds of staring eyes. A few smile but most of the stares are blank and I cannot read the emotion I know is behind them.

This makes me uneasy, and as I look at the next face to avoid the one before, I feel guilty and a little ashamed for showing up here to display the vast inequity of wealth separating us. I feel like I just want to say "I'm sorry." There are foraging dogs and pigs, and as we draw closer to our destination children clamor around from everywhere yelling HEYYOU,HEYYOU."

When we reach our destinations we find a waiting mob of hundreds who have come for medical help. Most of the patients are children brought by their parents. Most have diseases associated with filth; diseases found only rarely in the USA. Others have chronic wound infections, bones that have been broken for weeks or months, hernias and other congenital defects. Many children have nutritional deficiencies.

Some patients come after traditional remedies have failed. One woman recently brought a severely burned child who was unresponsive to treatments with manure poultices.

Patients are chosen based severity and treatability of their illness and are escorted into the gates of the hospital compound. As I push through the crowds looking for the sickest patients, mothers hold their babies out to display the maladies. Many people come to the clinics in order to get medications they can sell for profit. These people may complain of half a dozen or more ailments to get more medicine. One woman recently thought she didn't get enough medicine so she dropped her infant on the ground and left.

Not everyone will get into the clinics; their numbers far exceed our capabilities for this afternoon. So if one man gets into the clinic with a toothache, the next man will curiously also have a toothache; so does the woman behind him, and so it goes. But many have traveled for hours or days to get here, and hundreds will wait outside the gates with their ill family members and hope until the very end for a way in.

It is frustrating to attempt to help such an ailing population. Most of the visits are one-time-only. Properly diagnosing many patients would require lab support and follow-up visits, and that is impossible in most cases. ().

Even patients we can cure stand a good chance of recurring illness due to their filthy living environment.

As medics we must therefore take accomplishment in affecting only temporarily relief of human suffering until (country) can get on its feet and support its people. What they need is education and a government willing to confront many tough problems. In the meantime we're doing what little we can to help alleviate suffering. I'm going to vote strongly to push less resources toward care of the sick and more toward health education and vaccination of slightly healthier subpopulations in the city (i.e. those with a chance to rise above all this). I'm thinking that may leave a more lasting positive effect.

I apologize for spewing all this stuff, but I needed to give you some background on which to understand all the stuff I'm going to write over the next few months.

I'm doing fine, and I hope you all are too. Please write back and I promise future e-mails will have a lighter tone!

For now, take care, count your blessings, and goodnite.

Christmas Eve....24 Dec 97

Today I was part of a triservice military team accompanying (agency) on an environmental site survey to (city), a coastal town of about 40,000 located an hour-and-a-half west of here in (city #2). Our team included myself (the public health officer), our hospital commander, a physician, and a civil engineer. Our purpose was twofold: to gain first-hand appreciation of (city)'s filariasis problem with an emphasis on environmental contributors; secondly, to assess the feasibility of our US Support Group leading a cleanup effort aimed at reducing incidence of filariasis in (city) through reduction of

mosquito breeding habitat.

A community physician, Dr. _____, took us to the (city) hospital for an initial meeting with the director, a fellow community leader. Next we would have a full-day's tour down the streets of (city). Here we would gain full technicolor appreciation for their biggest health challenges.

Dr. _____ seated our group around an oval mahogany table in a small, close room with blue stucco walls and a 13-foot ceiling (why that tall?). Listening to him, we learned (city) has a small handful of what he called 'major' health concerns..... I thought to myself even their minor ones would probably make front page headlines at home, no problemo. But Dr. _____ stuck to the major ones. And as he went on, he explained filariasis the cause of elephantitis was THE number one problem in (city).

Tragically, filariasis has become hyperendemic in (city) over the past few years. While other vectorborne diseases such as malaria affect less than 1% of the population, filariasis infects approximately 30% of the town population. The director of (city)'s hospital estimates approx. 15% of the adult male population suffer from filarial hydrocoele. The local hospital even has a separate treatment ward for filariasis patients. We saw it. Painted in big red letters above the blue doorway is the sign: 'TRAITMENT D ELEPHANT.'

We learned that the major environmental contributor to filariasis in (city) is the liquor industry. This is the town's major industry, and over one hundred small distilleries operate in (city). They all manufacture 'rap,' a sugar cane alcohol used to make cream liqueurs.

The distillery process discharges lots and lots of water effluent in order to make just a little 'rap.' As a result, a labyrinth several kilometers in total length of small drainage canals course all over (city) (in theory) carrying wastewater away from the distilleries, downstream toward the sea.

It was four time, We got in cars and drove in dusty procession down narrow streets past donkeys, oxen, and a beat-up John Deere until we arrived at a distillery. We looked around inside and then stepped out to follow its effluent canal.

I call these waterways ‘canals,’ and that makes them sound somehow neat and orderly and proper. But mostly they’re hand-dug ditches about 10 feet wide and three feet deep. They issue that skin-bracer, wake-you-up, sour, fermenting smell as they course through backyards, front yards, doorsteps, and in some cases, right under, peoples’ shacks. And when I say ‘fun’ that’s an exaggeration. The canals USED to run. But that had to be a long time ago. Now most of them bulge and foam and bubble, choked with years of garbage, offal, turds, and every other imaginable form of organic waste known to man and beast.

(Sorry, I couldn’t spare the details).

Armed with a little knowledge about the ecology of the filariasis parasite, I think with both awe and remorse how perfectly the stage was set for this malady- like someone followed a recipe book or took notes from watching one of those glib celebrity cooking shows:

BANCROFTIAN FILARIASIS (From a small village in (country)): Prepare standing water, well choked with whatever you can find around the yard, barn or industrial spillway; gently blend ~~1~~on fresh CULEX’brand mosquitoes; add mixture to narrow ditch...5km long should be plenty; arrange 5,000 humans at water’s edge in shacks, tightly packed but not touching; fold ingredients until smooth; sprinkle evenly with pinch of parasite..(maybe a couple of infected cousins from over the mountain); place in shade for 6 months..... Wow, what a **HYDROCOELE**, or **ELEPHANTIASIS ELEGANTE’!!**

Back at the canal. Regarding this scene unbraced, I feel a little bit adrift and a little sick, so I lock my focus on the task at hand...

environmental assessment, so start assessing..... OK, making mental pictures for the record... mango peels, pig grunting upstream....is it?...yep, it’s belly deep in the stuff, now regarding me as something foreign.....right you are, buddy....., juice bottle, insects, stench, bananas, sun....hang in there, big guy?...I sense a torrent of details filling my mental picture of this town.... a sensory tide swelling into a real doozie I’m focusing hard to comprehend and put walls around this whole unbelievable (because its reality is so far beyond anything contrivable) scenario to keep it from getting too big (too late)....I finally have to walk away for a minute to deprive myself of any more visual cues. Much better.

For our team, this visit breaks new ground in every sense; for our hosts in (city)...new faces, same ol’ struggle. (AGENCY #2) has studied the filariasis problem in (city) over the last few years, funded by (agency). In fact, (AGENCY #2) currently employs a full-time field program director (on vacation today...too bad).

Although I’m not completely sure, I suspect that person’s role in (city) is managing surveillance and targeted intervention efforts (i.e., impregnated curtains, bednetting, education, etc.). That much is good...a start.

What I can’t explain is why, despite long-standing recognition of this filariasis ‘hotspot’ by international development agencies like (AGENCY), and despite extensive involvement by (AGENCY #2), environmental interventions to reduce mosquito breeding habitat (seems like a pretty core concept) have not been addressed until now. It’s curious. I bet I won’t be far off the mark in speculating it has something to do with (country)’s perpetual government turmoil. Seems like (country)’s Ministry of Health wishes to act as a brokerage for aid projects. They want to take the stick and administer (AGENCY)-funded initiatives, but they lack the organization (or the collective will, possibly?) to take the money and make things happen. Maybe

that's what happened to the environmental interventions phase of this project, and why (AGENCY) is now asking if the US military can do the job.

When I draft my after-action report (there always has to be a report, right?) I will recommend we provide public health assistance to (city) via an engineering project to clear the canals and get them flowing swiftly again so mosquito larvae can't survive. It's a worthwhile project that has potential for lasting positive impact for people of (city). Our military has the necessary folks and the equipment here, on the ground, so I'm going to vote we dedicate our resources to the cause. I think the rest of our site survey team feels likewise. (It will be up to the people of (city) to keep the canals clear, and that will be yet another challenge). (AGENCY) should get our summary sometime next week. (And since (AGENCY) is looking for sound guidance in appropriating US tax dollars down here)... I'm going to further recommend they explore funding options for an interim mosquito control contract to reduce mosquito numbers/new parasite infections until the engineers can make an impact and afterward, as needed.

It's 11:15 p.m, and I'm exhausted...but deeply gratified. Our collective effort today may precipitate the answer to (city)'s prayers. God knows folks here are suffering badly. With our engineers and their diesel-powered poop-scoopers and concrete forms....with (AGENCY)'s continuing interest... with (AGENCY #2)'s technical help and intervention programs....and with the hospital's efforts at diagnosis and treatment, we may get to see the fall of filariasis'in (city) (maybe for good). Cool, man.

Other than that, was a pretty ordinary day!

Thanks again, ____; Ill try to reach you soon."